ABSTRACT

CHIMERIC $GABA_B$ RECEPTOR

The present invention provides an isolated $GABA_B$ receptor protein comprising at least one $GABA_BR1a$ subunit and at least one $GABA_BR2a$ subunit, characterized in that said $GABA_B$ receptor has one high affinity agonist binding site and one low affinity agonist binding site. In particular the isolated recombinant $GABA_B$ receptor protein expressed by the $hGABA_BR1a/GABA_BR2$ CHO cell line deposited at the Belgian Coordinated Collections of Microorganisms (BCCM) as CHO-K1 h-GABA-b R1a/R2 clone on August 22, 2003 with the accession number LMBP 6046CB. It is thus an object of the present invention to provide the $hGABA_BR1a/GABA_BR2$ CHO cell line deposited at the Belgian Coordinated Collections of Microorganisms (BCCM) as CHO-K1 h-GABA-b R1a/R2 clone on August 22, 2003 with the accession number LMBP 6046CB.

The invention also provides the use of the aforementioned cell line in a method to identify $GABA_B$ receptor agonists using a functional or a binding assay. In particular in a radioligand-binding assay comprising the use of radiolabeled agonists such as for example ^{3}H-GABA or ^{3}H-baclofen.

In a particular embodiment the present invention provides the use of the aforementioned $GABA_B$ receptor in a method to identify a high affinity $GABA_B$ receptor agonist using a functional or a binding assay. In particular in a radioligand-binding assay comprising the use of radiolabeled agonists such as for example ^{3}H-GABA or ^{3}H-baclofen. Alternatively, the aforementioned binding assays are performed on cellular extracts, in particular cellular membrane preparations of the aforementioned cells.